**Hints for generating the trig equation from the given conditions:**

To generate equations of the form:

Y = A sin B(x + C) + D **or** Y = A cos B(x + C) + D

1. Choose **sin** or **cos** function according to the initial condition of the

given task.

1. If the Maximum value of a function corresponds to the initial situation (x = 0), then choose **cos** function.

b) If the Minimum value of a function corresponds to the initial situation (x = 0), then choose **– cos** function.

c) If Zero value of a function corresponds to the initial situation

(x = 0), then choose **sin** function.

d) If Min, Max, or Zero value occurs before or after the initial situation, then **X-shift** should be applied.

2. If the Minimum and Maximum value of a function is given, figure

out the **Amplitude** and **Y-shift** using the formulae:

**A = D =**

3. a) If the period (**T**) is given, then calculate the frequency

coefficient as **B =**

1. If the frequency coefficient (**B**) is given, then calculate the

period as **T =**